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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

COLEMAN, BRENDA LIBBY

ART UNIT	PAPER NUMBER
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1624

NOTIFICATION DATE	DELIVERY MODE
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09/07/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chiipdocket@michaelbest.com

Office Action Summary

Application No.

10/583,590

Applicant(s)

BRAJE ET AL.

Examiner

BRENDA COLEMAN

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-23 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-23 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-832)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/19/2009 & 8/28/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claims 1-23 are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 19-23 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The scope of the method claims are not adequately enabled solely based on its inhibitory effect on the dopamine D₃ receptor provided in the specification.

In evaluating the enablement question, several factors are to be considered. In *re Wands*, 8 USPQ2d 1400 (Fed. Cir. 1988); *Ex parte Forman*, 230 USPQ 546. The factors include: 1) The nature of the invention, 2) the state of the prior art, 3) the predictability or lack thereof in the art, 4) the amount of direction or guidance present, 5) the presence or absence of working examples, 6) the breadth of the claims, and 7) the quantity of experimentation needed.

The nature of the instant invention has claims, which embrace substituted

benzazepine compounds.

HOW TO USE: Claims 19-22 are to a method for treating any and all diseases and/or conditions associated with the modulation of the dopamine D₃ receptor antagonists, agonists and ligands. Any evidence presented must be commensurate in scope with the claims and must clearly demonstrate the effectiveness of the claimed compounds. The scope of claims 19-22 includes diseases and/or conditions not even known at this time, which may be associated with dopamine D₃ receptors. While the treatment of schizophrenia has been linked with dopamine D₃ receptors the art does not recognize use of such inhibitors as broad based drugs for treating all disorders instantly embraced.

The scope of "central nervous system disorders" cannot be deemed enabled. The notion that a compound could be effective against central nervous system disorders in general is contrary to our current understanding of how pharmacologicals work. All attempts to find a pharmaceutical to treat central nervous system disorders generally have thus failed.

Where the utility is unusual or difficult to treat or speculative, the examiner has authority to require evidence that tests relied upon are reasonably predictive of in vivo efficacy by those skilled in the art. See *In re Ruskin*, 148 USPQ 221; *Ex parte Jovanovics*, 211 USPQ 907; MPEP 2164.05(a).

Patent Protection is granted in return for an enabling disclosure of an invention, not for vague intimations of general ideas that may or may not be workable. Tossing out

the mere germ of an idea does not constitute enabling disclosure. *Genentech Inc. v. Novo Nordisk* 42 USPQ2d 1001.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following reasons apply:

- a. Claim 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 18, 19 and claims dependent thereon are vague and indefinite in that it is not known what is meant by "general" formula I. A formula is not general when all of the variables are defined. Deletion of "general" is suggested.
- b. Claim 1 and claims dependent thereon are vague and indefinite in that it is not known what is meant by "Di-(C₁-C₄-alkyl)amino" in the definition of the substituents of R¹. Capital letters are only to be used to begin a claim or in the nomenclature of chemical compounds.
- c. Claim 1 and claims dependent thereon are vague and indefinite in that it is not known what is meant by "R⁴-R⁸", which is a range which does not particularly point out and distinctly claim the subject matter which applicants regard as the invention, i.e. it fails to indicate that which is embraced by the range. The definitions of each individual variable must be clearly set forth herein.

- d. Claim 1 and claims dependent thereon are vague and indefinite in that it is not known what is meant by "the N-oxides of I" at the end of the claim. It is believed that the applicants intended the N-oxides of formula I.
- e. Claim 7 is vague and indefinite in that it is not known what is meant by "the abovementioned manner", where there is no mention of substituted phenyls in the claim.
- f. Claim 11 is vague and indefinite in that it is not known what is meant by "the abovementioned manner", where there is no mention of substituted heteroaromatic radicals in the claim.
- g. Claim 12 is vague and indefinite in that it is not known what is meant by the second occurrence of "or C₁-C₄-alkoxy, C₁-C₄-alkylamino, di-C₁-C₄-alkylamino, phenyl, phenoxy, C₃-C₈-cycloalkyl or C₃-C₈-cycloalkyloxy, where the last four groups mentioned may optionally have one or more substituents selected from C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₁-C₄-alkoxy, C₁-C₄-haloalkoxy and halogen" in the definition of the substituents on R^{1a}.
- h. Claim 13 recites the limitation "R^{1a}" in the second line. There is insufficient antecedent basis for this limitation in the claim.
- i. Claim 14 is vague and indefinite in that it is not known what is meant by the formula label (1.A/B) and 1.A. It is not sure which label is correct.
- j. Claim 14 recites the limitation "R^{1a}" in the 6th and 8th lines. There is insufficient antecedent basis for this limitation in the claim.

k. Claim 18 and claims dependent thereon are vague and indefinite in that it is not known what is meant by “the salts of I” in line 3 of the claim. It is believed that the applicants intended the salts of formula I.

l. Claim 18 and claims dependent thereon are vague and indefinite in that it is not known what is meant by “the N-oxides of I” in line 5 of the claim. It is believed that the applicants intended the N-oxides of formula I.

m. Claims 19-22 are vague and indefinite in that the claim provides for the use of claimed compounds, but the claim does not set forth any steps involved in determining which are the diseases capable of being mediated by a dopamine D₃ receptor antagonists or agonists or a dopamine D₃ receptor ligand. It is unclear which diseases are associated with dopamine D₃ receptor antagonists or agonists or a dopamine D₃ receptor ligand. Determining whether a given disease responds or does not respond to such an inhibitor will involve undue experimentation. Suppose that a given drug, which has inhibitor properties in vitro, when administered to a patient with a certain disease, does not produce a favorable response. One cannot conclude that specific disease does not fall within this claim. Keep in mind that:

A. It may be that the next patient will respond. No pharmaceutical has 100% efficacy. What success rate is required to conclude our drug is a treatment? Thus, how many patients need to be treated? If “successful treatment” is what is intended, what criterion is to be used? If one person in 10 responds to a given drug, does that mean that the disease is treatable? One in

100? 1,000? 10,000? Will the standard vary depending on the current therapy for the disease?

B. It may be that the wrong dosage or dosage regimen was employed. Drugs with similar chemical structures can have markedly different pharmacokinetics and metabolic fates. It is quite common for pharmaceuticals to work and or be safe at one dosage, but not at another that is significantly higher or lower. Furthermore, the dosage regimen may be vital --- should the drug be given e.g. once a day, or four times in divided dosages? The optimum route of administration cannot be predicted in advance. Should our drug be given as a bolus iv or in a time release po formulation. Thus, how many dosages and dosage regimens must be tried before one is certain that our drug is not a treatment for this specific disease?

C. It may be that our specific drug, while active in vitro, simply is not potent enough or produces such low concentrations in the blood that it is not an effective treatment of the specific disease. Perhaps a structurally related drug is potent enough or produces high enough blood concentrations to treat the disease in question, so that the first drug really does fall within the claim. Thus, how many different structurally related inhibitors must be tried before one concludes that a specific compound does not fall within the claim?

D. Conversely, if the disease responds to our second drug but not to the first, both of which are inhibitors in vitro, can one really conclude that the disease falls within the claim? It may be that the first compound result is giving the

accurate answer, and that the success of second compound arises from some other unknown property, which the second drug is capable. It is common for a drug, particularly in cancer and CNS diseases, to work by many mechanisms. The history of psychopharmacology is filled with drugs, which were claimed to be a pure receptor XYX agonist or antagonist, but upon further experimentation shown to affect a variety of biological targets. In fact, the development of a drug for a specific disease and the determination of its biological site of action usually precede linking that site of action with the disease. Thus, when mixed results are obtained, how many more drugs need be tested?

E. Suppose that our drug is an effective treatment of the disease of interest, but only when combined with some totally different drug. There are for example, agents in antiviral and anticancer chemotherapy, which are not themselves effective, but are effective treatments when the agents are combined with something else.

Consequently, determining the true scope of the claim will involve extensive and potentially inconclusive research. Without it, one skilled in the art cannot determine the actual scope of the claim. Hence, the claim is indefinite.

n. Claim 19-21 provides for the use of the compounds of formula I, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 19-21 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 6-10 and 12-23 are rejected under 35 U.S.C. 102(e) as being anticipated by COOPER et al., U.S. Patent Application Publication No. 2005/0085461. COOPER teaches the compounds, compositions and method of use of the compounds of formula I where R¹ is H, -C(O)-CF₃, Me, Et, propyl, isopropyl, etc.; R² is H, Br, OMe, furan-2-yl, thiophen-2-yl, Et, O(isopropyl), OEt, etc.; A is a single bond; B is N(H), N(Me), N(propyl), N(Et), N(isopropyl), etc.; Y is a single bond; and Ar is 4-butylphenyl,

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4-tert-butylphenyl, 4-cyclohexylphenyl, 4-trifluoromethoxyphenyl, 4-propylphenyl, 4-isopropylphenyl, 4-(1,1-dimethylpropyl)phenyl, 4-pentylphenyl, 4-butoxyphenyl, 4-propoxyphenyl, 4-trifluoromethylphenyl, 4-iodophenyl, etc. See for example compounds 1-82.

5. Claims 1, 2, 6-9, 11-13 and 15-23 are rejected under 35 U.S.C. 102(e) as being anticipated by BROMIDGE et al., U.S. Patent Application Publication No.

2005/0090485. BROMIDGE teaches the compounds, compositions and method of use of the compounds of formula I where R^1 is H, $-C(O)-CF_3$, etc.; R^2 is H, Br, OMe, Cl, etc.; A is a single bond; B is N(H), etc.; Y is a single bond; and Ar is 3-bromo-2-trifluoromethoxyphenyl, 3-chloro-2-trifluoromethoxyphenyl, phenyl, 3,5-dichloro-2-methoxyphenyl, 4-bromo-2-trifluoromethoxyphenyl, 3-trifluoromethylphenyl, 4-bromo-2-ethylphenyl, 2,3-dichlorophenyl, 4-methylphenyl, 5-bromothiophen-2-yl, 3-chlorophenyl, 4-bromo-2-trifluoromethoxyphenyl, 4-chloro-2-trifluoromethoxyphenyl, etc. See for example compounds 1-17.

6. Claims 1, 2, 6-8, 12, 13 and 15-23 are rejected under 35 U.S.C. 102(e) as being anticipated by BROMIDGE et al., U.S. Patent Application Publication No.

2005/0222124. BROMIDGE teaches the compounds, compositions and method of use of the compounds of formula I where R^1 is H, Me, Et, n-propyl, isopropyl, isobutyl, $-CH_2-Ph$, $-C(O)-CF_3$, etc.; R^2 is H, Br, OMe, OEt, O-(isopropyl), Cl, NMe_2 , piperidin-1-yl, SEt, Me, Et, etc.; A is a single bond; B is N(H), N(Me), N(isopropyl), etc.; Y is a single bond;

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and Ar is 4'-chlorobiphenyl, 4'-chloro-3-methylbiphenyl, 3',4'-dichlorobiphenyl, 3'-chlorobiphenyl, etc. See for example compounds 1-217.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 6-10 and 12-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over COOPER et al., U.S. Patent Application Publication No. 2005/0085461. The generic structure of COOPER encompasses the instantly claimed compounds (see Formula I) and for the same uses as claimed herein. Examples 1-82, etc. anticipates the compounds and compositions of the compounds of formula (I) of the instant invention as outlined above in the 102 (e) rejection. The remaining species differ only in the nature of the A, B, R¹, R², R³, R⁴, R⁵ or R⁶ substituents. Page 1, paragraphs [0014] through [0023] defines the variables A, B, R¹, R², R³, R⁴, R⁵ or R⁶ as follows: A is (CH₂)_m wherein m represents an interger from 1 and 2; B is (CH₂)_n wherein n represents an interger from 1 and 2; R¹ represents hydrogen or C₁₋₆alkyl; R² represents hydrogen, halogen, hydroxyl, cyano, nitro, hydroxyC₁₋₆alkyl, trifluoromethyl, trifluoromethoxy, C₁₋₆alkyl, C₁₋₆alkoxy, -(CH₂)_pC₃₋₆cycloalkyl, -(CH₂)_pC₃₋₆cycloalkoxy, -COC₁₋₆alkyl, -SO₂C₁₋₆alkyl, -SOC₁₋₆alkyl, -S-C₁₋₆alkyl, CO₂C₁₋₆alkyl, CO₂NR⁷R⁸, -SO₂NR⁷R⁸, -(CH₂)_pNR⁷R⁸, -(CH₂)_pNR⁷COR⁸, optionally substituted aryl, optionally

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substituted heteroaryl or a fused bicyclic heterocyclic ring system; R^3 represents hydrogen or C_{1-6} alkyl; R^4 represents halogen, trifluoromethyl, trifluoromethoxy, C_{1-6} alkyl, C_{1-6} alkoxy, $-(CH_2)_pC_{3-6}$ cycloalkyl or $-(CH_2)_pC_{3-6}$ cycloalkoxy; R^5 and R^6 each independently represent hydrogen, halogen, hydroxyl, cyano, nitro, hydroxy C_{1-6} alkyl, trifluoromethyl, trifluoromethoxy, C_{1-6} alkyl, C_{1-6} alkoxy, $-(CH_2)_pC_{3-6}$ cycloalkyl, $-(CH_2)_pC_{3-6}$ cycloalkoxy, $-COC_{1-6}$ alkyl, $-SO_2C_{1-6}$ alkyl, $-SOC_{1-6}$ alkyl, $-S-C_{1-6}$ alkyl, CO_2C_{1-6} alkyl, $CO_2NR^7R^8$, $-SO_2NR^7R^8$, $-(CH_2)_pNR^7R^8$, $-(CH_2)_pNR^7COR^8$, optionally substituted aryl, optionally substituted heteroaryl or a fused bicyclic heterocyclic ring system; R^7 and R^8 each independently represent hydrogen or C_{1-6} alkyl; and p independently represents an integer selected from 0, 1, 2 and 3. Compounds of the instant invention are generically embraced by COOPER in view of the interchangeability of the A, B, R^1 , R^2 , R^3 , R^4 , R^5 and R^6 substituents of formula (I). Thus one of ordinary skill in the art at the time the invention was made would have been motivated to select for example 4-fluorophenyl or indolyl for instant ring Ar as well as other possibilities from the generically disclosed alternatives of the reference and in so doing obtain the instant compounds in view of the equivalency teaching outlined above.

⁸ Claims 1, 2, 6-13 and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over BROMIDGE et al., U.S. Patent Application Publication No. 2005/0090485. The generic structure of BROMIDGE encompasses the instantly claimed compounds (see Formula I) and for the same uses as claimed herein. Examples 1-17, etc. anticipates the compounds and compositions of the compounds of formula (I) of the instant invention as outlined above in the 102 (e) rejection. The

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remaining species differ only in the nature of the A, R¹, R², m and n substituents. Page 1, paragraphs [0005] through [0009] defines the variables A, R¹, R², m and n as follows: A is represents phenyl, naphthyl or a monocyclic or bicyclic heteroaryl group each of which may be optionally substituted by one or more substituents which may be the same or different, and which are selected from those defined for R¹; R² represents hydrogen or C₁₋₆alkyl; m represents an integer from 1 to 3; n represents an integer from 1 to 4; and R¹ represents hydrogen, halogen, hydroxyl, cyano, nitro, trifluoromethyl, trifluoromethoxy, C₁₋₆alkyl, trifluoromethanesulfonyloxy, pentafluoroethyl, C₁₋₆alkoxy, arylC₁₋₆ alkoxy, C₁₋₆alkylthio, C₁₋₆alkoxyC₁₋₆alkyl, C₃₋₇ cycloalkylC₁₋₆alkoxy, C₁₋₆alkanoyl, C₁₋₆ alkoxycarbonyl, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylsulfinyl, C₁₋₆alkylsulfonyloxy, C₁₋₆alkylsulfonylC₁₋₆alkyl, arylsulfonyl, arylsulfonyloxy, arylsulfonylC₁₋₆alkyl, C₁₋₆alkylsulfonamido, C₁₋₆alkylamido, C₁₋₆alkylsulfonylamidoC₁₋₆alkyl, C₁₋₆alkylamidoC₁₋₆alkyl, arylsulfonamido, arylcarboxamido, arylsulfonamidoC₁₋₆alkyl, arylcarboxamidoC₁₋₆alkyl, aroyl, aroylC₁₋₆alkyl, arylC₁₋₆alkanoyl, or a group CONR³R⁴ wherein R³ and R⁴ independently represent hydrogen or C₁₋₆alkyl or together may be fused to form a 5- to 7-membered aromatic or non-aromatic heterocyclic ring optionally interrupted by an O or S atom. Compounds of the instant invention are generically embraced by COOPER in view of the interchangeability of the A, R¹, R², m and n substituents of formula (I). Thus one of ordinary skill in the art at the time the invention was made would have been motivated to select for example 4-fluorophenyl or thiophenyl for instant ring Ar as well as other possibilities from the generically disclosed alternatives of the reference and in

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so doing obtain the instant compounds in view of the equivalency teaching outlined above.

9. Claims 1, 2, 6-8, 12, 13 and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over BROMIDGE et al., U.S. Patent Application Publication No.

2005/0222124. The generic structure of BROMIDGE encompasses the instantly claimed compounds (see Formula I) and for the same uses as claimed herein.

Examples 1-217, etc. anticipates the compounds and compositions of the compounds of formula (I) of the instant invention as outlined above in the 102 (e) rejection. The remaining species differ only in the nature of the A, R¹, R², m and n substituents. Page 1, paragraphs [0005] through [0009] defines the variables A, B, R¹, R², R³, R⁴, Y, Z, Ar, r and q as follows: A is (CH₂)_m wherein m represents an interger from 1 and 2; B is (CH₂)_n wherein n represents an interger from 1 and 2; R¹ represents hydrogen or C₁₋₆alkyl; R² represents hydrogen, halogen, hydroxyl, cyano, nitro, hydroxyC₁₋₆alkyl, trifluoromethyl, trifluoromethoxy, C₁₋₆alkyl, C₁₋₆alkoxy, C₁₋₆alkoxyC₁₋₆alkyl, C₃₋₇cycloalkylC₁₋₆alkoxy, -(CH₂)_pC₃₋₆cycloalkyl, -(CH₂)_pC₃₋₆cycloalkoxy, -COC₁₋₆alkyl, -SO₂C₁₋₆alkyl, -SOC₁₋₆alkyl, -S-C₁₋₆alkyl, C₁₋₆alkylsulfonyloxy, C₁₋₆alkylsulfonylC₁₋₆alkyl, CO₂C₁₋₆alkyl, CO₂NR⁷R⁸, -SO₂NR⁷R⁸, C₁₋₆alkylsulfonamido, C₁₋₆alkylsulfonylamidoC₁₋₆alkyl, -(CH₂)_pNR⁷R⁸, C₁₋₆alkylamidoC₁₋₆alkyl, -(CH₂)_pNR⁷COR⁸, arylsulfonyl, arylsulfonyloxy, arylsulfonylC₁₋₆alkyl, arylsulfonamido, arylcarboxamido, arylsulfonamidoC₁₋₆alkyl, arylcarboxamidoC₁₋₆alkyl, aroyl, aroylC₁₋₆alkyl, arylC₁₋₆alkanoyl, SO₂NR⁷R⁸, optionally substituted aryl, optionally substituted heteroaryl or optionally substituted heterocyclyl, or a group CONR⁷R⁸ or SO₂NR⁷R⁸ wherein R⁷ and

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R⁸ together may be fused to form a 5- to 7-membered aromatic or non-aromatic heterocyclic ring optionally interrupted by an O or S atom; R³ represents hydrogen or C₁₋₆ alkyl; Ar represents optionally substituted phenyl or optionally substituted monocyclic heteroaryl group; R⁴ represents optionally substituted aryl or optionally substituted heteroaryl; R⁷ and R⁸ each independently represent hydrogen, C₁₋₆alkyl or together form a 5- to 7-membered heterocyclic ring; Z represents a bond, and oxygen atom or C₁₋₆alkylene; Y represents hydrogen or C₁₋₆alkyl; r represents an integer from 1 to 4 and q represents an integer from 1 to 3. Compounds of the instant invention are generically embraced by BROMIDGE in view of the interchangeability of the A, B, R¹, R², R³, R⁴, Y, Z, Ar, r and q substituents of formula (I). Thus one of ordinary skill in the art at the time the invention was made would have been motivated to select for example 4-trifluoromethylphenyl or furanyl for instant ring Ar as well as other possibilities from the generically disclosed alternatives of the reference and in so doing obtain the instant compounds in view of the equivalency teaching outlined above.

Claim Objections

10. Claim 14 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must be in the alternative. See MPEP § 608.01(n).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENDA COLEMAN whose telephone number is (571)272-0665. The examiner can normally be reached on 9:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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